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WHAT IS CLAIMED IS:

- 1. Procedure for suppressing the crosstalk between multiplex channels of a multiplexer (3) which is linked in a circuit arrangement (1) on the input side with signal connections (P1, P2, ... Pn) which can be configured as inputs and outputs, in which the following procedural steps are performed:
- a test is made as to whether at least one of the signal connections (P1, P2, ... Pn) is overmodulated by an impermissible input voltage value,
- each signal connection identified as an overmodulated signal connection (P1, P2, ... Pn) is configured as an output and set to a defined logical signal level.
- 2. Procedure according to claim 1, wherein the following procedural steps are performed to test whether a signal connection (P1, P2, ... Pn) is overmodulated:
- the signal connection (P1, P2, ... Pn) is configured as an input,
- the input voltage value at the signal connection (P1, P2, ... Pn) is converted by an analog-digital converter (2) connected on the load side of the multiplexer (3) into a digital data value (s) which lies within a data range limited by a lower data limit value and an upper data limit value,
- if the digital data value equals the upper or lower data limit value, the signal connection (P1, P2, ... Pn) is identified as overmodulated.
- 3. Procedure according to claim 2, wherein the procedural steps are repeated cyclically and wherein a signal connection (P1, P2, ... Pn) which has been identified as an overmodulated signal connection in a previous cycle and has been configured as an output is released for configuration as an input if it is no longer overmodulated.
- 4. Procedure according to claim 3, wherein each overmodulated signal connection 2.5 (P1, P2, ... Pn) configured as an output is set to a high level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the upper data limit value

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- 5. Procedure according to claim 3, wherein each overmodulated signal connection (P1, P2, ... Pn) configured as an output is set to a low level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the lower data limit value.
- 6. Procedure according to claim 3, wherein each overmodulated signal connection (P1, P2, ... Pn) configured as an output is set to a high level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the upper data limit value, and is set to a low level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the lower data limit value.